Safe Kids
WORLDWIDE®

Walk a Mile in Their Shoes
A Study of High-Risk Child Pedestrians

October 2006

Introduction

Child pedestrians are confronted every day by traffic hazards that overwhelm their cognitive, developmental, behavioral, physical and sensory abilities.[1] Each year, more than 600 children die as a result of pedestrian injuries in the United States.[2] Male and African-American children have disproportionately high rates of pedestrian death and injury, with female and Caucasian children having the lowest rates of any demographic with reliable data on record.[3] According to literature on the problem, children at a higher risk of being injured or killed as pedestrians are more likely to live in urban or high-density areas or in low-income households. In contrast, those at lower risk tend to live in areas of lower density and in households of higher socioeconomic status.[4 5 6 7 8 9]

Table 1: Deaths to Child Pedestrians Ages 14 and Under in the United States from 1999 to 2003 [10]

Race	Deaths	Population	Crude Rate
White	2,350	235,252,351	1.00
Black	842	49,710,579	1.69
Hispanic	677	54,581,490	1.24
American Indian/ Alaskan Native	56*	4,169,126	1.35
Asian/Pacific Islander	90*	12,927,827	0.69
Gender			
Male	2,131	154,624,998	1.38
Female	1,207	147,416,521	0.82

*Low number of deaths reported decreases reliability of rates.

In 2000, Safe Kids Worldwide launched Safe Kids Walk This Way, a program that addresses child pedestrian death and injury at the behavioral and environmental levels. Safe Kids Worldwide is focusing on examining the role of individual attitudes, beliefs and behavior in child pedestrian death and injury. In order to determine whether there are behavioral differences between high-risk and low-risk populations as well as to address the disproportionately high rates of pedestrian death and injury among African-American boys, Safe Kids Worldwide's pedestrian program focused research efforts on one question:

What are the attitudes, beliefs and behavioral tendencies of children and their parents that may contribute to the high incidence of child pedestrian deaths and injuries among those at highest risk?

To answer this question, Safe Kids Worldwide collaborated with local Safe Kids coalitions in U.S. metropolitan areas to conduct focus groups. Participating coalitions held focus group discussions with African-American boys and their parents/caregivers and with Caucasian girls and their parents/caregivers. The results of this project will be used to develop pedestrian safety tactics, education and messaging tailored to high-risk populations.

Methodology

Project Design

Ten Safe Kids coalitions serving diverse metropolitan areas were selected and agreed to participate in the focus group project. Coalitions conducted 36 focus groups between May 24, 2006 and August 2, 2006. The project and its design were approved by Institutional Review Boards.

All participating Safe Kids coalitions serve metropolitan areas that were included in *Child Pedestrians at Risk: A Ranking of U.S. Metropolitan Areas* research report released by Safe Kids in 2005. Coalitions representing all three levels of the ranking report (most dangerous, middle and least dangerous) were selected. Coalitions were then sent materials, including standardized materials for data collection, and were required to participate in focus group training.

Coalition members recruited the focus group participants. Each coalition held four focus groups with participants who met the following criteria (Tables 2 and 3):

- **High-risk children**: African-American males ages 6-14, living in low-income areas of high population density.

- **Parents of high-risk children**: Parents/caregivers of children meeting the above criteria.

- **Low-risk children**: Caucasian females ages 6-14, living in moderate- to high-income areas of lower population density.

- **Parents of low-risk children**: Parents/caregivers of children meeting the above criteria.

Coalitions provided compensation for participants including gift cards, food and cash incentives.

Table 2: Participating Children Demographic Information

	High-risk Children	Low-Risk Children
Number of participants	74	63
Grade	6	5
Race/ethnicity		
White	NA	97%
Black	99%	2%
Hispanic	3%	2%
American Indian/ Alaskan Native	3%	2%
Asian/Pacific Islander	NA	NA
Other	1%	10%

*Some child participants reported belonging to more than one race/ ethnicity group.

Table 3: Participating Parent/Caregiver Demographic Information

	Parents of High-Risk Children	Parents of Low-Risk Children
Number of participants	47	46
Gender of Parent		
Male	21%	6.5%
Female	79%	94%
Average Age of Child Participant	10	10
Race/ethnicity		
White	2%	98%
Black	92%	NA
Hispanic	2%	NA
American Indian/ Alaskan Native	4%	NA
Asian/Pacific Islander	NA	NA
Other	6%	80%
Education Level of Parent		
College graduate	28%	67%
Household Income		
50,000 or more	23%	80%

*Some parent participants reported belonging to more than one race/ ethnicity group.

Project Procedures

Focus Groups

Focus group moderators received two different four-question scripts — one for parents/caregivers and one for child participants. Questions for children were designed to gather information about individual perceptions of safety in neighborhoods, perceptions of built environment walking conditions, walking behavior, and baseline pedestrian safety knowledge. Similarly, questions for parents/caregivers were designed to gather information about individual perceptions of safety in neighborhoods, perceptions of built environment walking conditions for children, their children's walking behavior, and pedestrian safety knowledge they viewed as necessary for child pedestrians.

Each focus group was conducted by one moderator accompanied by a note-taker. Each discussion was digitally recorded and lasted no longer than one hour.

Quantitative Follow-Up Survey

Focus group moderators distributed separate brief surveys to children and parents on completion of the focus groups. Surveys contained questions intended to gather data on basic demographic information, perceptions of neighborhood safety, attitudes and behavior of child pedestrians, and feelings about the focus group process. Surveys took no longer than five minutes to complete.

210 parents and children participated in 36 focus groups and 230 completed the additional quantitative survey. One city participated in the quantitative survey but did not conduct focus groups.

Data Analysis

After the focus groups were completed, files were sent to Safe Kids Worldwide and transcribed. Focus group transcripts were analyzed for recurring themes.

Data obtained from the quantitative survey were analyzed using SPSS 14.0.

Focus Group Themes

Themes From Children

The high prevalence of crime in neighborhoods of high-risk males affects their walking behavior.

A significant number of children in the high-risk group describe crime — such as gang activity, theft, vandalism, illegal drug activity, shootings and threats of physical violence — as an influence on their walking behavior. A number of children in high-crime areas report the need to avoid eye contact with individuals, avoid trouble spots in the neighborhood, avoid large groups of people and travel quickly. Children in the high-risk population also note the lack of opportunities to walk leisurely outside. These children report staying indoors to avoid crimes such as shootings and kidnappings.

Crosswalks tend to be located primarily around schools, not in many residential neighborhoods.

Most children from both groups report the absence of crosswalks in their neighborhoods, but that they were present around school zones. This absence of crosswalks was cited as one of the reasons that many children practiced mid-block crossing.

Mid-block crossing is practiced by children in both high-risk and low-risk groups.

Both groups of children report mid-block street crossing behavior. In addition to the lack of crosswalks in neighborhoods, reasons for mid-block crossing include distance from crosswalks and traffic-free roads giving the appearance of a safe place to cross.

High-risk males tend to have more negative perceptions of their neighborhoods than low-risk females.

When asked to describe their neighborhoods, most high-risk children use negative terms while those from the low-risk group tend to speak positively about their neighborhoods. As illustrated by the highlighted quotes, issues such as the high incidence of violence and crime, as well as the poor physical appearance of neighborhoods, are reasons for these negative perceptions among children in the high-risk population. In contrast, children in the low-risk group report things like friendly neighbors and the ability to have fun, safely, as reason for having positive perceptions of their neighborhoods.

Children from both groups report remaining constantly aware while walking.

Both groups of children reported that they remain constantly aware when they are out walking. While both groups echo the same sentiment, their reasoning for keeping alert differs. As reflected by the highlighted quotes ("In Their Own Words," page 5), boys in the high-risk group report the possibility of being victims of crime as a reason for high awareness, while girls in the low-risk group practice this behavior in order to avoid unintentional injury.

Themes From Parents

Parents of high-risk children report the high occurrence of crime in neighborhoods as a more serious issue than pedestrian safety.

Most parents report not allowing their children to walk or play outside without adult supervision. Both groups of parents express concerns about the risk of their child being kidnapped, however parents of low risk children also fear pedestrian related injury. The high rate of crime in their neighborhoods is of greater concern to parents of high-risk children.

Parents of low-risk children tend to report positive perceptions of their neighborhoods, while parents of high-risk children report having mixed perceptions.

When asked to describe their neighborhoods, most parents of low-risk children use positive terms, while those from the high-risk group tend to have mixed feelings about their neighborhoods. Similar to their children, parents/caregivers in our low-risk group report that factors such as friendly neighborhoods influence their perceptions of their neighborhoods as safe. While some parents/caregivers in the high-risk group echo their children's negative perceptions of their neighborhoods — deeming them unsafe — a number of parents in this group express neutral feelings about their neighborhoods.

Poor driver behavior affects parents' perceptions of safety for their children.

Parents report that drivers who speed, disregard traffic signs and cut through neighborhoods to avoid traffic, as do reckless teen drivers.

Traffic calming/regulating devices reported by parents are inconsistent.

Parents of low-risk children report more traffic-calming/regulating devices than parents of high-risk children. Communities where low-risk children live have more functioning traffic lights, brightly colored crosswalks and speed bumps than communities where high-risk children live.

Parents think that children are practicing safe walking behavior most of the time.

Most parents believe their children cross streets correctly and obey traffic signals. Parents also report that there is a possibility that children behave differently when they are unsupervised.

Themes From All Groups

Parents and children report an absence of consistent, adequate sidewalks.

While most participants report living in communities that do have sidewalks, they also report that these sidewalks are not consistently present throughout many neighborhoods and are not properly maintained.

Parents teach their children to avoid strangers.

All groups report that avoiding strangers is either important for kids to know, or that children have been taught to stay away from strangers at some point in their lives. Parents and children are acutely aware of child abduction and view this issue as relevant to child pedestrian safety.

Children learn positive crossing behavior.

Most children report being taught positive crossing behavior such as watching out for cars, looking both ways while crossing and not running out into streets. Parents view these skills as essential to preventing pedestrian death and injury.

Children are encouraged to travel in groups.

All groups express the importance of children walking in groups. While most participants view the "buddy system" as a preventive measure against pedestrian injury and child abduction, high-risk children walk in groups as insurance against physical violence.

In Their Own Words

High-Risk Children

"Sometimes if I'm walking, and I see a lot of people, I'll walk and I'll go all the way across the other side of the street sometimes just to avoid them period."
— Oakland

"My neighborhood is bad because people always have fights."
— Chicago

"You never know what's coming, you never know who out there. You never know what might happen, so I'm always cautious. Regardless of where I'm walking, I look. You know, I look in all directions."
— Chicago

Parents of High-Risk Children

"There are stop signs … they [drivers] ignore them."
— Oklahoma City

"My only concern is the gangs."
— Chicago

"They speed and they could easily jump the curb and one of those kids can get hit by a car."
— Dallas

"There's no red light, crossing, nothing. It's like at your own risk, you know?"
— Memphis

"We have sidewalks on my street, but on other streets, there are not sidewalks."
— Memphis

Low-Risk Children

"Not to talk to strangers … That's what they say to me every time I leave the house."
— Tampa

"Pay attention to the drivers if you're walking."
— Orlando

"Really friendly and fun …."
— New York City

"Pay attention because cars are coming from driveways."
— St. Louis

"Make sure you're always with a buddy."
— Tampa

Parents of Low-Risk Children

"They're careful and cautious when we're out with them."
— Orlando

"Most of the time they are safe. They do look for corners. They do stop and look both ways …."
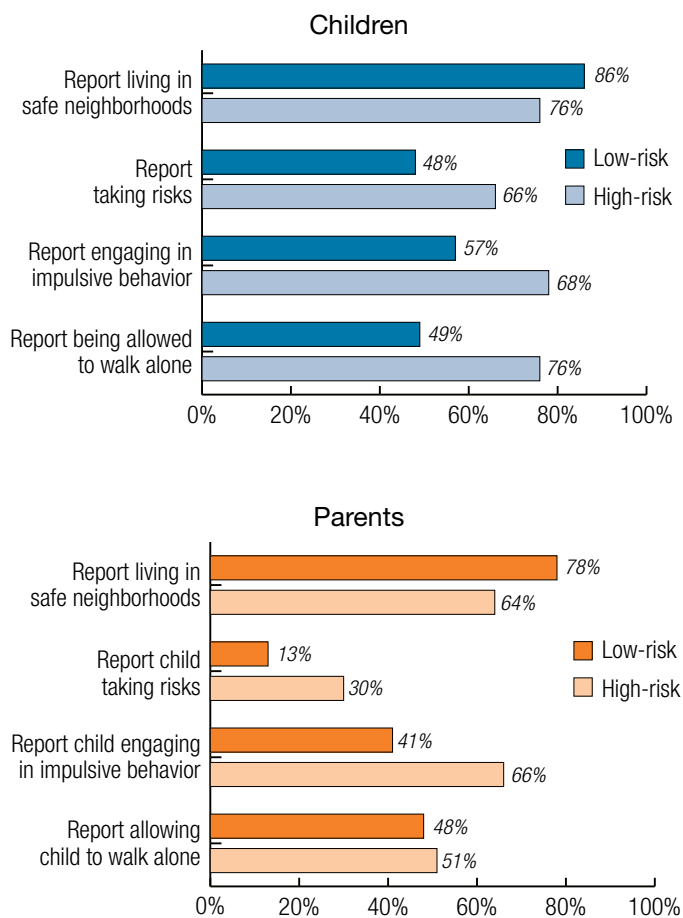— Tampa

"Mine are not allowed to cross the street without me."
— Dallas

"Whether they're with an adult, they always need to be with somebody else when walking."
— Oklahoma City

Quantitative Survey Results

Children

Report living in safe neighborhoods	Low-risk 86% / High-risk 76%
Report taking risks	Low-risk 48% / High-risk 66%
Report engaging in impulsive behavior	Low-risk 57% / High-risk 68%
Report being allowed to walk alone	Low-risk 49% / High-risk 76%

Parents

Report living in safe neighborhoods	Low-risk 78% / High-risk 64%
Report child taking risks	Low-risk 13% / High-risk 30%
Report child engaging in impulsive behavior	Low-risk 41% / High-risk 66%
Report allowing child to walk alone	Low-risk 48% / High-risk 51%

Discussion

Safe Kids Worldwide sought to examine the attitudes, beliefs and behavior patterns of African-American boys and their parents, which may have an effect on the disproportionately high rates of child pedestrian death and injury in this population. These same factors were examined among Caucasian girls and their parents to determine whether protective factors exist in this group (which has a lower risk of pedestrian injury) that are absent among the high-risk boys. Through the focus group discussions and quantitative survey results, there were attitudes and behavior patterns identified as present among both groups, and others that were particular to only one of the risk groups.

Neighborhood Atmosphere

In the focus groups, high-risk boys defined safe walking very differently from their low-risk female counterparts. Not only are children in high-risk communities concerned about being hit by a car while crossing the street, but they also contend with higher rates of crime in their neighborhoods. This may explain why they report taking more traffic-related risks than their Caucasian female counterparts. For the high-risk

group, the fear of being hit by a bullet competes with the fear of getting hit by a car. Commonly proposed pedestrian safety behavior, such as encouraging children to make eye contact with drivers, may not be realistic in communities where looking at someone in the eye may be perceived as an invitation to fight. Findings from this research suggest that children in these high-risk communities are knowledgeable about safe pedestrian behavior, but that they do not live in environments that enable them to practice such behavior.

The results of the quantitative survey echo the experiences of members from both the high-risk and low-risk groups. The high-risk males were more likely to report that their neighborhoods were unsafe, that they were allowed to walk alone, and that they took more risks and engaged in more impulsive behavior than the low-risk females. The responses from parents/caregivers mirrored those of the children. While we understand that these risk-taking tendencies can be attributed to gender differences (since this project did not control for gender), the conclusion can also be made that children living in high-risk neighborhoods are forced to take risks, "think on their feet" or be impulsive in order to safely navigate the environments in which they live.

Resources in the Community

Another key finding of the focus groups is the gap between the allocation of traffic-calming devices in low-income neighborhoods and higher-income neighborhoods. While parents and children from our low-risk groups report the presence of functioning traffic signals and traffic-calming devices (such as speed bumps), a number of the participants from the high-risk communities report that their neighborhoods lack these devices. Like the high incidence of crime in high-risk neighborhoods, this difference could play a role in the proper practice of safe pedestrian behavior.

Parental Supervision

Parents from both the high-risk and low-risk groups report that they supervise their children while they are walking, teach them about safe walking and have confidence that their children tend to practice safe walking behavior. The findings from the focus groups — including concerns about crime, the fear of child abduction and concern over poor driver behavior — illustrate that parents are more concerned with the environments in which their children walk than with their children's walking behavior.

While children from both groups admit engaging in unsafe crossing behavior such as mid-block crossing, they reportedly do so because of hazards in their physical surroundings. They report using caution and common sense to navigate their environments. The parents of these children appear to recognize this and have confidence in the capabilities of their children to act safely, but lack confidence in their safety due to the hazards in their children's physical surroundings.

After review and analysis of the comments from all focus group participants, Safe Kids Worldwide finds an apparent connection between a child's pedestrian safety behavior and his or her environment. Programs that address this relationship are more likely to have a positive impact on child pedestrian safety than programs that ignore the neighborhood atmosphere.

Recommendations

Protecting child pedestrians from injury requires a multifaceted approach including education, advocacy, engineering for a safer walking environment and a focused emphasis on low-income communities. The Safe Kids Walk This Way pedestrian safety program encompasses a multifaceted, community-based effort that teaches children to be safe pedestrians, teaches adults to be safe drivers, and advocates for environmental improvements to places where children walk. Based on findings from this research project, Safe Kids Worldwide advises that future child pedestrian safety initiatives incorporate these specific actions:

Education and Advocacy

Address the relationship between crime and child pedestrian behavior in high-risk communities. The results of this research show that child pedestrian safety programs must address the effect that the high incidence of crime has on children in volatile neighborhoods. All children should be able to feel safe walking in their neighborhood; however, this is not a reality in many cities across the United States. Injury prevention professionals focused on unintentional injury should collaborate with violence prevention professionals, law enforcement and local officials to address the incidence of child pedestrian death and injury among African-American boys in urban settings.

Raise driver awareness of dangers to child pedestrians. Children and their parents reported poor driver behavior as an impediment to safe walking. Drivers need to be educated of the impact of hazardous driving on child pedestrians. In addition to targeting messages to drivers to encourage safe driving behavior, safety professionals should consider partnering with other organizations that focus on driving safety to ensure broad dissemination of the child pedestrian safety message.

Encourage parents to teach and enforce safe child pedestrian behavior. Parents play a critical role in educating their children about safe walking behavior. Many focus group participants cited the role they play in teaching key safety messages and practicing safe walking behavior together as a family.

Engineering

Advocate for more traffic-calming devices in high-risk communities. Injury prevention professionals should focus efforts on increasing physical resources such as visible crosswalks, safety signage, speed bumps and functioning traffic signals for communities in need. Children in both low-income and higher-income communities are entitled to live in safe environments with adequate traffic calming devices so they have the opportunity to practice safe behavior.

Priority Focus on Low-Income Communities

Commit funds to areas with socioeconomic need. When funds are awarded to promote child pedestrian safety, one criterion for consideration should be the socioeconomic status of the recipient community. Organizations that serve low-income, high-risk communities and that have the capacity to effectively advocate for appropriate resources should be given priority funding. The organizations should also collaborate with community officials to advocate for changes that result in suitable walking environments for children.
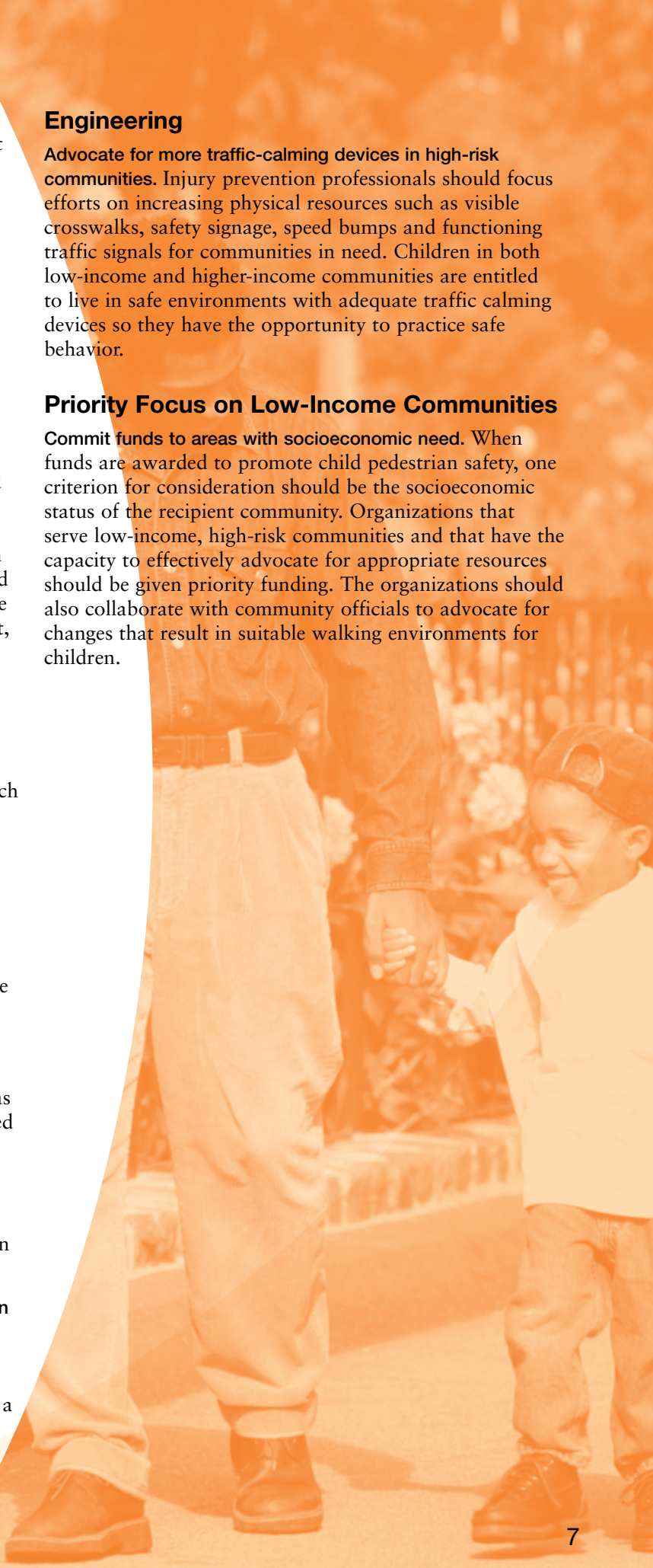
Safe Kids coalitions conducted research in these cities:

Oakland, California

Chicago, Illinois

Dallas, Texas

Memphis, Tennessee

New York, New York

Oklahoma City, Oklahoma

Orlando, Florida

Tampa, Florida

St. Louis, Missouri

Milwaukee, Wisconsin

Endnotes

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